



FINANCIAL INDICATORS METHODOLOGY & ANALYSIS GUIDE

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Financial Indicators Methodology & Analysis Guide

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I. EXECUTIVE SUMMARY

This Financial Indicators Methodology & Analysis Guide was prepared by the U.S. Department of Housing and Urban Development's (HUD), Real Estate Assessment Center (REAC) with assistance from Arthur Andersen LLP. The purpose of this guide is to assist REAC and other users in understanding and calculating the financial indicators used to assess the financial condition of Public Housing Authorities (PHAs), under the *Public Housing Assessment System (PHAS)*. The PHAs to be assessed include all PHAs that administer programs under the terms of an annual contributions contract (ACC) with HUD, including:

- public housing,
- PHAs administering Section 8 Housing Assistance Payment Programs, and
- owners of housing receiving Section 8 Project-Based Housing Assistance.

The financial condition of each PHA will be assessed annually by REAC to determine whether the PHA:

- has sufficient financial resources, and
- is managing those resources effectively to support the provision of decent, safe, and sanitary housing.

REAC's assessment and analysis will be based upon the financial data schedule (FDS) submitted electronically by the PHA using the Financial Assessment Subsystem (FASS). This data will be gathered by each PHA from their books and records and reported in accordance with generally accepted accounting principles (GAAP), as prescribed by the Governmental Accounting Standards Board (GASB). The established financial indicators will be automatically calculated and scored using FASS, as described in the *PHAS* rule.

The following key financial indicators (as published in the Federal Register [FR-4313-P-01]), have been established to assess a PHA's financial condition:

1. **Current Ratio:** *a measure of liquidity* measures the PHA's ability to cover its current obligations
2. **Number of Months Expendable Fund Balance:** *a measure of viability* measures the PHA's ability to operate using its fund balance without relying on additional funding
3. **Days Receivable Outstanding:** *a measure of rent collectibility* measures the PHA's ability to collect its tenant receivables in a timely fashion
4. **Occupancy Loss:** *a measure of the PHA's ability to maximize revenue* measures the extent to which the PHA is maximizing its rental revenue

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5. **Expense Management/Utility Consumption:** *a measure of the operating cost per unit* measures the PHA's ability to maintain its expense ratios at a reasonable level relative to its peers (adjusted for size and region)
6. **Net Income or Loss:** *a measure of the net income (loss) impact against viability* measures how the year's operations have affected the PHA's viability

This guide:

- Provides background on the historical assessment of PHAs;
- Summarizes the current assessment methodology;
- Summarizes the financial indicators and their calculation methodology;
- States the intended use of the indicators (what the indicator will be used to measure).

II. BACKGROUND

This guide provides a basis for understanding the financial indicators used by REAC in assessing the financial condition of PHAs. It documents the calculation methodology of each indicator and summarizes what the indicator is used to measure.

HUD has historically evaluated the management of PHA's using indicators and scoring. The Public Housing Management Assessment Program (PHMAP) was the historical analytical tool, and consisted of eight (8) indicators. Each indicator had components that were calculated separately, but analyzed as a group. The indicators/components were:

- Vacancy Rate and Unit Turnaround Time
 - Vacancy percentage and progress in reducing vacancies over the last three years
 - Unit turnaround time
- Modernization
 - Unexpended funds over three years old
 - Timeliness of fund obligation
 - Contract administration
 - Quality of the physical work
 - Budget controls
- Rents Uncollected
- Work Orders
 - Emergency work orders
 - Non-emergency work orders and progress during the last three years
- Annual Inspection of Units and Systems
 - Annual inspection of units
 - Annual inspection of systems
- Financial Management
 - Cash reserves
 - Energy consumption
- Resident Services and Community Building
 - Economic lift (HUD funded programs)
 - Resident organization

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- Resident involvement
- Resident programs management (HUD funded programs)

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- Security
 - Tracking and reporting crime
 - Screening of applicants
 - Lease enforcement
 - Grant program goals (HUD funded programs)

The points by indicator were calculated after calculating each components score. The points were converted into a percentage through a series of calculations, and the PHA was rated based on the percentage. High performers were those PHAs receiving scores of 90 percent or better, standard performers were those PHAs with scores equal to or greater than 60 and less than 90 percent, and troubled performers were those PHAs with scores of less than 60 percent¹.

HUD, specifically REAC, developed and published a new methodology to assess the financial condition of each PHA. This methodology was tested and verified as useful and applicable by REAC by:

- Meeting with industry leaders and discussing the composition and calculation of each indicator;
- Meeting with fee accountants and auditors in the practice of consulting and auditing for public housing programs;
- Modeling financial data for PHAs, using both GAAP and non-GAAP data;
- Developing an assessment and scoring prototype for calculating advisory scores;
- Developing and testing scoring models;
- Pilot testing the financial data schedule and FASS system.

The results supported that the financial indicators designed will appropriately collect financial information necessary for assessing the financial condition of each PHA.

¹ Source: PHMAP Training Coursebook, Adjustments and Scoring, 1997 U.S. Housing and Urban Development

III. CURRENT METHODOLOGY

REAC developed the new assessment methodology to evaluate the financial condition of each PHA in order to obtain results that are objective, uniform and verifiable.

REAC is requiring the PHAs to electronically report financial data, prepared in accordance with GAAP, using a predetermined reporting format, the financial data schedule (FDS). REAC's objective is to analyze the operating results and financial condition of each PHA and to compare the results to each PHA's peer group.

The new methodology uses four evaluation tools. These evaluation tools are published in 24 CFR Part 901 and 902, Public Housing Assessment System (PHAS); Final Rule. The four evaluation tools are:

- Physical condition
- Financial condition
- Management operations
- Resident service and satisfaction

Each tool will be separately evaluated and scored, with physical condition, financial condition, and management operations each worth 30 points respectively, and resident service and satisfaction worth 10 points - for an overall available score of 100 points. The scores will then be accumulated and the PHA will be identified, based on the total score, as a:

- **High Performer**
- **Standard Performer**
- **Troubled PHA**

To obtain a **High Performer** status, a PHA must score at least 60 percent of the points available in each of the four categories and achieve an overall score of 90 percent or greater. High performers will be afforded incentives that include relief from specific HUD requirements, public recognition and bonus points in funding competitions.

A PHA that achieves a total PHAS score of less than 90 percent but not less than 60 percent shall be designated as a **Standard Performer**. All standard performers must correct reported deficiencies. All standard performers that receive a score of less than 70 percent but greater than 60 percent shall be subject to additional oversight. This oversight includes the submission of an Improvement Plan to eliminate deficiencies in the PHA's performance within 30 days after the issuance of the PHAS score. The PHA must correct the deficiencies within 90 days or within the period provided by HUD in the Approved Improvement Plan.

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A PHA that achieves a total score of less than 60 percent or achieves a score of less than 60 percent of the total points available under more than one of the PHAS Indicators 1, 2, or 3 shall be designated as a **Troubled PHA** and referred to the newly established Troubled Agency Recovery Center (TARC). PHAs referred to the TARC will be required to submit a Recovery Plan and a Memorandum of Agreement (MOA). The MOA will be a binding contractual agreement between HUD and the PHA and include annual and quarterly performance targets, strategies to achieve performance targets, incentives for meeting such targets and the consequences of failing to meet the targets. The maximum recovery period, unless extended by the TARC, is the first full fiscal year following execution of the MOA.

TARC-referred PHAs that fail to show significant improvement the following year will automatically be referred to the HUD Enforcement Center which shall initiate proceedings for judicial appointment of a receiver and other sanctions as may be appropriate.

IV. FINANCIAL DATA SCHEDULE

This section includes:

- A sample completed Financial Data Schedule (FDS). The FDS includes:
 - A balance sheet for each program represented;
 - A statement of revenue and expenses for each program represented;
 - A calculation of the financial indicators for the overall entity or applicable program.
- Definitions of the financial indicators, including:
 - The methodology for calculation;
 - Identification of the FDS line numbers used.

The financial indicators are, in general, calculated and analyzed on an entity-wide basis to include the total financial position of each PHA. Individual programs were not analyzed. Program personnel may require additional analysis to determine the status of any particular program.

Financial Data Schedule – Sample Housing Authority

A completed FDS is included as Appendix A to provide an example of how financial information should be posted to the schedule. In addition, the FDS shows how the posted financial information will be used to calculate the financial indicators. There is no discussion or attempt to provide an analysis of the financial indicator results.

Financial Indicators Methodology and Calculation

The following pages include a summary of the measurement focus and a detailed description of the FDS lines used to calculate each of the six financial ratios: current ratio, number of months expendable fund balance, days receivable outstanding, occupancy loss, expense management/utility consumption, and net income (loss).

1) ***Current Ratio:***

The current ratio is a liquidity measure of the PHA's ability to cover its current obligations. It will be measured by using the adjusted current ratio that is designed to show available, unrestricted current assets divided by the unrestricted current liabilities.

It is designed to indicate if a PHA could meet all current obligations if they became immediately due and payable. A PHA should generally have available current resources equal to or greater than their current obligations in order to be considered financially liquid. Restricted current assets (FDS lines 112, 113, and 132), Interprogram due from (FDS line 144), Interprogram due to (FDS line 347), and Inventory accounts (FDS lines 143 and 143.1) are not included in the calculation.

To calculate the current ratio:

- Calculate available current resources by adding indicated FDS lines (numerator).
- Calculate current obligations by adding indicated FDS lines (denominator).
- Divide the available, unrestricted current resources by the current obligations.

Line	Numerator - Available Current Resources
111	Cash -unrestricted
114	Cash - tenant security deposits
120	Total receivables, net of allowances for doubtful accounts
131	Investments - unrestricted
142	Prepaid expenses and other assets

Line	Denominator - Current Obligations
311	Bank overdraft
312	Accounts payable \leq 90 days
313	Accounts payable > 90 days
321	Accrued wage/payroll taxes payable
322	Accrued compensated absences
324	Accrued contingency liability
325	Accrued interest payable
331	Accounts payable - HUD PHA programs
332	Accounts payable - PHA projects
333	Accounts payable - Other government

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341	Tenant security deposits
342	Deferred revenue
343	Current portion of Long-Term debt - Capital projects
344	Current portion of Long-Term debt - Operating borrowings
345	Other current liabilities
346	Accrued liabilities - other

2) Number of Months Expendable Fund Balance:

This is a viability measure of the PHA's ability to operate using its net available, unrestricted resources without reliance on additional funding.

This indicator compares the net available unrestricted resources to the average monthly operating expenses. The result of this calculation shows how many months of operating expenses and the repayment of operating debt principal that can be covered with currently available, unrestricted resources.

The net available, unrestricted resources, also defined as Expendable Fund Balance (EFB), includes all current resources available to the PHA after subtracting the amount needed by the PHA to pay current obligations and the long-term portion of operating debt. The number of months EFB a PHA should have in order to be considered financially viable varies depending upon the peer group with which the PHA is associated.

PHAs utilizing the governmental fund model may not record certain items as operating expenses (i.e., compensated absences, self-insurance liability, unrecognized transition liability, special term/severance benefits liability, and allowance for doubtful accounts liability). Therefore, the changes in the associated liability accounts must be considered when calculating total operating expenses for the purpose of calculating financial indicator ratios and comparing the results to PHAs utilizing the enterprise fund model. Restricted current assets (FDS lines 112, 113, and 132), Interprogram due from (FDS line 144), Interprogram due to (FDS line 347), and Inventory accounts (FDS lines 143 and 143.1) are not included in the calculation. However, all liabilities associated with operating borrowings, whether current or long-term, are recognized as current liabilities.

To calculate the ratio of number of months expendable fund balance:

- Calculate the available current resources by adding indicated FDS asset lines and subtracting indicated FDS liability lines (numerator).
- Calculate total operating and other expenses by adding indicated FDS lines (denominator).
- Divide total operating and other expenses (denominator) by 12 months to determine the average monthly operating expense.
- Divide the numerator by the average monthly operating expense (denominator).

Line	Numerator - Available Current Resources
Assets	

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111	Cash - unrestricted
114	Cash - tenant security deposits
120	Total receivables, net of allowances for doubtful accounts
131	Investments - unrestricted

Line	Numerator - Available Current Resources
142	Prepaid expenses and other assets
Less:	
<i>Liabilities</i>	
311	Bank Overdraft
312	Accounts payable \leq 90 days
313	Accounts payable > 90 days
321	Accrued wage/payroll taxes payable
322	Accrued compensated absences
324	Accrued contingency liability
325	Accrued interest payable
331	Accounts payable - HUD PHA programs
332	Accounts payable - PHA projects
333	Accounts payable - Other government
341	Tenant security deposits
342	Deferred revenue
344	Current portion of Long-Term debt - operating borrowings
345	Other current liabilities
346	Accrued liabilities - other
352	Long-term debt, net of current - operating borrowings

Line	Denominator - Total Operating and Other Expenses
969	Total operating expenses
971	Extraordinary maintenance
972	Casualty losses - non-capitalized
977	Debt principal payment - governmental funds
978	Dwelling units rent expense
1102	Debt principal payments - enterprise funds
1105	Changes in compensated absence liability (in the GLTDAG)
1106	Changes in contingent liability balance (in the GLTDAG)
1107	Changes in unrecognized pension transition liability (in the GLTDAG)
1108	Changes in special term/severance benefits liability (in the GLTDAG)

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1109	Changes in allowance for doubtful accounts - dwelling rents
1110	Changes in allowance for doubtful accounts - other

3) Days Receivable Outstanding:

Days receivable outstanding measures rent collectibility. The purpose of this indicator is to calculate the average number of days it takes a PHA to collect its tenant accounts receivable.

This indicator divides the gross tenant accounts receivable, including receivables for rent, maintenance charges, excess utility charges and other adjustments, by the total tenant revenue. The total tenant revenue is the revenue shown on the rent roll plus revenue for excess utilities and other tenant charges. The allowance for doubtful accounts is excluded from the gross tenant accounts receivable.

PHAs utilizing the governmental fund model directly reduce their tenant revenue by the allowance for doubtful accounts. Therefore, the change in the balance of the allowance account will be considered when determining the net tenant revenue for financial indicator ratios (i.e., increase the revenue for bad debts recognized during the current year).

To calculate the days receivable outstanding ratio:

- Divide the total tenant revenue by 365 to obtain the average daily total tenant revenue.
- Divide the gross tenant accounts receivable² by the average daily total tenant revenue.

Line	Numerator - Total Tenant Accounts Receivable
126	Accounts receivable - tenants - dwelling units

Line	Denominator - Total Daily Tenant Revenue
705	Total tenant revenue
1109	Changes in allowance for doubtful accounts - dwelling rents
1110	Changes in allowance for doubtful accounts - other

² For year one the accounts receivable balance will be the actual year end balance. For subsequent years the accounts receivable balance will be the average of the beginning and ending balance for the year.

4) **Occupancy Loss:**

Occupancy loss measures the maximization of rental revenue. It measures the extent to which the PHA is not realizing potential rental income due to unoccupied units or units taken off-line under the low rent program or other state and local programs.

This indicator compares unit months available to the unit months leased. The unit months available is the total number of units available under all programs (HUD, state, or other funds) multiplied by the number of months all units are available for rental less that approved for demolition.

The unit months leased is the actual number of months each unit was rented during the fiscal year as calculated from the PHA's tenant rent rolls.

To calculate the occupancy loss ratio:

- Determine the total unit months available by multiplying total units by the total number of months they are available for rent.
- Calculate the total number of units approved for demolition and multiply those units by the months they are offline based upon the date of demolition approval by HUD. Subtract this amount from the product calculated above to determine total unit months available.
- Determine the total unit months leased using the rent rolls for each unit. The unit months leased are calculated by determining the number of months each unit was rented during the year and summing the total for all units
- Divide the unit months leased by unit months available and subtract that factor from 1.

The ability of management to keep units in service and occupied can be estimated based on this calculation. If the occupancy loss ratio is high, and operating expenses per unit are low, the PHA may not be managing or maintaining the housing units in a manner that encourages or optimizes occupancy.

Line	Numerator - Unit Months Leased
1121	Number of unit months leased

Line	Denominator - Unit Months Available
1120	Unit months available

5) Expense Management/Utility Consumption:

Expense management per month measures the PHA's ability to manage and maintain its low rent program expenses at a level relative to its peers (adjusted for size and region).

This indicator calculates the total average low rent program expenses for leased low rent units. It enables management to determine if the per unit cost is reasonable or if operating expenses should be analyzed and/or adjusted.

PHAs utilizing the governmental fund model may not record certain items as operating expenses. Therefore, the change in the associated liability accounts must be considered when calculating total operating expenses for financial indicator ratios.

Each expense category is given a weight as shown in the table below. These weights are used in order to emphasize increased spending in tenant related expense categories and to encourage management over administrative over other general expenses. The weights are as follows:

Expense Category	Weight
Administrative	.34
Tenant services	.10
Utilities	.03
Ordinary maintenance and operations	.10
Protective services	.10
General Expenses	.33
Total	1.00

To calculate the expense management/utility consumption ratio:

- Multiply each expense category by the weights shown in the table above.
- Add the resulting weighted expenses (numerator).
- Divide the total weighted expenses by the total low rent unit months leased (low rent program only) (denominator).

5) Expense Management/Utility Consumption (continued):

Administrative (.34 percent of total)

Line	Numerator - Administrative
911	Administrative salaries
912	Auditing fees
913	Outside management fees
914	Compensated absences
915	Employee benefit contributions - administrative
916	Other operating - administrative
1105	Changes in compensated absence liability (in the GLTDAG)
1107	Changes in unrecognized pension transition liability (in the GLTDAG)
1108	Changes in special term/severance benefits liability (in the GLTDAG)

Tenant Services (.10 percent of total)

Line	Numerator - Tenant Services
921	Tenant services - salaries
922	Relocation costs
923	Employee benefit contributions - tenant services
924	Tenant services - other

Utilities (.03 percent of total)

Line	Numerator - Utilities
931	Water
932	Electricity
933	Gas
934	Fuel
935	Labor
937	Employee benefit contributions - utilities
938	Other utilities expense

Ordinary Maintenance (.10 percent of total)

Line	Numerator - Ordinary Maintenance
941	Ordinary maintenance and operations - labor
942	Ordinary maintenance and operations - materials & other
943	Ordinary maintenance and operations - contract costs
945	Employee benefit contributions - ordinary maintenance
971	Extraordinary maintenance

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Protective Services (.10 percent of total)

Line	Numerator - Protective Services
951	Protective services - labor
952	Protective services - other contract costs
953	Protective services - other
955	Employee benefit contributions - protective services

General Expenses (.33 percent of total)

Line	Numerator - General Expenses
961	Insurance premiums
962	Other general expenses
963	Payments in lieu of taxes
964	Bad debt - tenant rents
965	Bad debt - mortgages
966	Bad debt - other
967	Interest expense
968	Severance expense
975	Fraud losses
977	Debt principal payment - governmental funds
978	Dwelling units rent expense
1102	Debt principal payments - enterprise funds
1106	Changes in contingent liability balance (in the GLTDAG)
1109	Changes in allowance for doubtful accounts - dwelling rents
1110	Changes in allowance for doubtful accounts - other

Line	Denominator - Total Units Month Leased
1121	Number of Months Leased

6) Net Income or Loss:

Net income (loss) measures how the results of the year's current operations have affected the PHA's viability.

This indicator compares the PHAs adjusted net income (loss) to the net available (unrestricted) current resources (the EFB).

It indicates whether the PHA is adequately managing its income and expenses to maintain a balanced budget. PHAs which have excessive net losses will be unable to sustain operations if income is not maximized and expenses are not more efficiently and effectively controlled.

PHAs utilizing the governmental fund model do not record certain items as operating expenses. Therefore, the change in the associated liability accounts must be considered when calculating total net income. FDS lines 1109 and 1110, however, need not be considered since the bad debt expense recognized by PHAs utilizing the enterprise fund model approximately adjusts net income in the same manner as the allowance reduces gross income for PHAs utilizing the governmental fund model. However, all liabilities associated with operating borrowings, whether current or long-term, are recognized as current liabilities.

To calculate the net income (loss) ratio:

- Calculate the adjusted net income (loss) by subtracting the indicated FDS lines from FDS line 970 (numerator).
- Calculate the available current resources by adding indicated FDS asset lines and subtracting indicated FDS liability lines (denominator).
- Divide the adjusted net income by the available current resources.

Line	Numerator - Adjusted Net Income (Loss)
970	Excess operating revenue over operating expenses
Less:	
971	Extraordinary maintenance
972	Casualty losses - non-capitalized
973	Housing assistance payments
975	Fraud losses
976	Capital outlays - governmental funds
978	Dwelling units rent expense
1101	Capital outlays - enterprise funds
1105	Changes in compensated absence liability (in the GLTDAG)

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1106	Changes in contingent liability balance (in the GLTDAG)
1107	Changes in unrecognized pension transition liability (in the GLTDAG)
1108	Changes in special term/severance benefits liability (in the GLTDAG)

Line	Denominator - Available Current Resources
111	Cash -unrestricted
114	Cash - tenant security deposits
120	Total receivables, net of allowances for doubtful accounts
131	Investments - unrestricted
142	Prepaid expenses and other assets
Less:	
311	Bank Overdraft
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321	Accrued wage/payroll taxes payable
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324	Accrued contingency liability
325	Accrued interest payable
331	Accounts payable - HUD PHA programs
332	Accounts payable - PHA projects
333	Accounts payable - Other government
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344	Current portion of Long-Term debt - operating borrowings
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APPENDIX A: Sample Housing Authority